

REMARKS

This Amendment and Response is submitted in reply to the Final Office Action dated January 24, 2007, in which the Examiner:

rejected claims 1-7 under 35 U.S.C. § 102(b) as anticipated by DE 19520912 (DE '912);

rejected claims 9 and 12 under 35 U.S.C. § 102(b) as anticipated by DE 19748997 (DE '997);

rejected claim 8 under 35 U.S.C. § 103(a) as unpatentable over DE '912;

rejected claim 10 under 35 U.S.C. § 103(a) as unpatentable over DE '997;

rejected claim 11 under 35 U.S.C. § 103(a) as unpantentable over DE '912, either alone or in view of DE '997.

Applicants respectfully traverse the rejections below. Claims 1-12 are currently pending. Claims 1, 8 and 9 are independent claims.

Applicants note that both the cited references, DE '912 and DE '997, are in the German language, and the Examiner has apparently not provided an English language translation (or even an Abstract) for either of these references. Thus, the evidence supporting the Examiner's rejections based on these references is currently limited, at best, to what may be gleaned from the Figures in those references. See MPEP 706.02.II, concerning reliance upon foreign language documents in support of a rejection. See also, MPEP 2125, concerning drawings as prior art.

To facilitate prosecution, Applicants have obtained English language Abstracts of both DE '912 and DE '997, as well as a translation of a portion of DE '997. However, in the event the Examiner sees fit to maintain any of the claim rejections based on these references, Applicants request that the Examiner obtain a full translation of the underlying document, as "[c]itation of and reliance upon an abstract without citation of and reliance upon the underlying scientific document is generally inappropriate where both the abstract and the underlying document are prior art." (MPEP 706.02.II.)

Applicants thank the Examiner for the telephone interview regarding the final status of the current Office Action. Pursuant to the Examiner's suggestion, Applicants' contentions in this regard are provided below.

Regarding when a second of subsequent Office Action may properly be made Final, MPEP 706.07(a) provides, in part:

...a second or any subsequent action on the merits in any application or patent undergoing reexamination proceedings *will not be made final if it includes a rejection, on newly cited art*, other than information submitted in an information disclosure statement filed under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p), of any claim not amended by applicant or patent owner *in spite of the fact that other claims may have been amended to require newly cited art*. [Emphasis added.]

In Applicants' October 20, 2006 Response to Office Action, claims 8-10 were not substantively amended. Apart from the correction of minor informalities in claims 8-10, claims 8 and 9 were merely rewritten in independent form, to include the recitations of the previously presented independent claim 1, from which both claims 8 and 9 directly depended. Thus, claims 8 and 9 (and claim 10, which depends directly from claim 9) were substantively no different than when the Examiner considered them prior to issuance of the June 20, 2006 Office Action.

The minor informalities corrected included the removal of reference numerals (e.g., "(P1)") from the claims, and the correction of the antecedent basis for the recitation "pressure control device" (i.e., "the" replaced with "a") to address a rejection under 35 U.S.C. § 112, second paragraph. Regarding such amendments, MPEP 706.07(a) further provides:

A second or any subsequent action on the merits in any application or patent involved in reexamination proceedings should not be made final if it includes a rejection, on prior art not of record, of any claim amended to include limitations which should reasonably have been expected to be claimed. See MPEP § 904 *et seq.* For example, one would reasonably expect that a rejection under 35 U.S.C. 112 for the reason of incompleteness would be replied to by an amendment supplying the omitted element.

In this instance, even if the replacement of "the" with "a" was substantive, it was clearly reasonable to expect that Applicants would have responded to a 35 U.S.C. § 112, second paragraph, rejection for lack of antecedent basis by amending the claims at issue to supply the proper antecedent basis.

Thus, claims 8 and 9 (and claim 10, which depends directly from claim 9) were substantively no different than when the Examiner considered them prior to issuance of the June 20, 2006 Office Action. However, in the current Final Office Action, new grounds of rejection have been made against all of these claims. As the subject matter of these claims was no different than when the Examiner previously considered them, the new grounds of rejection made against these claims in the current Final Office Action could not have been necessitated by Applicants' claim amendments. Accordingly, the current Office Action was not properly made Final, and if the Examiner maintains the current rejections of claims 8-10 another Office Action must be issued.

Claim 1 was rejected under 35 U.S.C. § 102(b) as anticipated by DE '912. An anticipation rejection under § 102 is improper unless a single prior art reference shows or discloses each and every claim recitation. Applicants' claim 1 recites, in part, a water purification device comprising a diaphragm unit having a diaphragm, which separates a primary side from a secondary side, wherein the primary side is connected with a pressure control device, which controls the pressure on the primary side in dependence on the pressure on the secondary side, wherein the pressure control device includes a control valve, which is connected to the diaphragm unit, and wherein the control valve has a valve element, the valve element being acted upon by the pressure on the primary side in either an opening or a closing direction, and by the pressure on the secondary side in the other of the opening or the closing direction.

DE '912 does not show or disclose each and every claim 1 recitation. For instance, DE '912 does not show or disclose a pressure control device including a control valve having a valve element, wherein the valve element is acted upon by the pressure on the primary side in either an opening or a closing direction, and by the pressure on the secondary side in the other of the opening or the closing direction. Instead, DE '912 appears to show that an element 43 of valve 40 is acted upon in one direction by pure water flowing from conduit 15a to conduit 15b, and in the other direction by unfiltered water containing concentrated impurities in the conduit 16b (via channel 52). The pressure in conduit 16b is not necessarily the same as the pressure on side 13a of the filter unit 13, conduit 16b

being separated from side 13a both by the valve 40, itself, and by a check valve 22 and a pump 11. Therefore, the pressure in conduit 16b, acting on the element 43 of valve 40, is not properly considered primary side pressure. Applicants' claim 1, on the other hand, recites that a valve element of a control valve is acted upon by pressure on the primary side.

Thus, DE '912 does not show or disclose each and every recitation of Applicants' claim 1. Accordingly, Applicants respectfully submit that the rejection of claim 1 under 35 U.S.C. § 102(b) as anticipated by DE '912 is improper for at least this reason, and should be withdrawn.

Claims 2-7 were also rejected under 35 U.S.C. § 102(b) as anticipated by DE '912. These claims all depend, directly or indirectly, from Applicants' claim 1, and include additional recitations thereto. Accordingly, Applicants respectfully submit that the rejection of claims 2-7 under 35 U.S.C. § 102(b) as anticipated by DE '912 is improper for at least the same reasons stated in connection with claim 1, and should be withdrawn.

Claim 9 was rejected under 35 U.S.C. § 102(b) as anticipated by DE '997. Applicants' claim 9 recites, in part, a water purification device comprising a diaphragm unit having a diaphragm, which separates a primary side from a secondary side, wherein a pressure control device controls the pressure on the primary side in dependence of the quality of the water to be purified.

DE '997 does not show or disclose each and every recitation of Applicants' claim 9. For instance, DE '997 does not show or disclose that a pressure control device controls the pressure on the primary side in dependence of the quality of the water to be purified. Instead, DE '997 discloses:

If the permeate quality [as measured by conductivity measuring cell 24] does not correspond to the predetermined requirements, the valve 34 is closed..., and at the same time the valve 41 is opened..., so that the permeate with the insufficient quality can be led to the suction side of the pump 5 through the permeate return pipe 40. (DE '997, col. 5, lines 12-22; see enclosed translation.)

Applicants note that returning permeate to the suction side of the pump 5 does not necessarily even affect pressure on the primary side of the membrane module 10 (as the Examiner asserts), much less constitute *control* of primary side pressure

– as is recited by Applicants’ claim 9. Furthermore, the opening and closing of valves 34 and 41 by the arrangement of DE ‘997 is done in response to permeate quality (the quality of water already purified), rather than in response to the quality of water to be purified – as is further recited by Applicants’ claim 9.

Thus, DE ‘997 does not show or disclose each and every recitation of Applicants’ claim 9. Accordingly, Applicants respectfully submit that the rejection of claim 9 under 35 U.S.C. § 102(b) as anticipated by DE ‘997 is improper for at least this reason, and should be withdrawn.

Claim 12 was also rejected under 35 U.S.C. § 102(b) as anticipated by DE ‘997. Claim 12 depends directly from claim 9 and includes additional recitations thereto. Accordingly, Applicants respectfully submit that the rejection of claim 12 under 35 U.S.C. § 102(b) as anticipated by DE ‘997 is improper for at least the same reasons stated in connection with claim 9, and should be withdrawn.

Claim 8 was rejected under 35 U.S.C. § 103(a) as unpatentable over DE ‘912. A claim rejection under 35 U.S.C. § 103(a) is improper unless the Examiner establishes a prima facie case of obviousness. A prima facie case of obviousness requires that prior art references, alone or in combination, teaches or suggests each and every claim recitation. Applicants’ claim 8 recites, in part, a water purification device, wherein a pressure control device controls pressure on the primary side so that pressure on the secondary side is in a range from 35 to 180 bar.

DE ‘912 does not teach or suggest each and every claim recitation. For example, DE ‘912 does not teach or suggest that pressure on the side 13a is controller to keep pressure on the side 13b within *any* particular range. In other words, DE ‘912 does not appear to teach or suggest that pressure on the secondary side is result effective.

However, the Examiner contends that “configuring the system to operate at a certain outlet pressure is within ordinary skill and depends upon the environment in which it is used and the demands of the consumer.” (Final Office Action, p. 4.) Applicants respectfully disagree. First, as noted, DE ‘912 does not indicate that pressure on the secondary side is result effective. Before a claimed

range can be obviousness as a matter of optimization, the parameter must first be recognized as a result-effective variable. (See MPEP 2144.05.II.B.) Therefore, even if "configuring the system to operate at a certain outlet pressure is within ordinary skill," this does not render the claimed range obvious, as the Examiner has not shown where prior art recognizes the outlet pressure range as result effective. Second, DE '912 teaches a reverse osmosis process for supply of pure water for blood dialysis. (See English language Abstract.) As argued in the October 20, 2006 Response to Office Action (see bottom of p. 10 – top of p. 11), there is nothing to suggest that those of ordinary skill in the art would consider the optimum outlet pressure range for such a process to be anywhere near Applicants' claimed range.

Thus, DE '912 does not teach or suggest each and every recitation of Applicants' claim 8. Accordingly, Applicants respectfully submit that the rejection of claim 8 under 35 U.S.C. § 103(a) as unpatentable over DE '912 is improper for at least this reason, and should be withdrawn.

Claim 10 was rejected under 35 U.S.C. § 103(a) as unpatentable over DE '997. Applicants' claim 10 depends directly from claim 9, and includes additional recitations thereto. DE '997 does not teach or suggest each and every recitation of Applicants' claim 9. For instance, DE '997 does not teach or suggest that a pressure control device controls the pressure on the primary side in dependence of the quality of the water to be purified. Instead, DE '997 appears to teach controlling the return of permeate with insufficient quality to the suction side of the pump 5, based on the quality of permeate that has already passed through the membrane module 10.

Thus, DE '997 does not teach or suggest each and every recitation of Applicants' claim 9. Accordingly, Applicants respectfully submit that the rejection of dependent claim 10 under 35 U.S.C. § 103(a) as unpatentable over DE '997 is improper for at least this reason, and should be withdrawn.

Claim 11 was rejected under 35 U.S.C. § 103(a) as unpatentable over DE '912, either alone or in view of DE '997. Applicants' claim 11 depends directly from claim 1 and includes additional recitations thereto.

DE '912 does not teach or suggest each and every recitation of Applicants' claim 1. For instance, DE '912 does not teach or suggest a pressure control device including a control valve having a valve element, wherein the valve element is acted upon by the pressure on the primary side in either an opening or a closing direction, and by the pressure on the secondary side in the other of the opening or the closing direction.

DE '997 does not add to the teachings of DE '912 at least in that DE '997 also does not teach or suggest a pressure control device including a control valve having a valve element, wherein the valve element is acted upon by the pressure on the primary side in either an opening or a closing direction, and by the pressure on the secondary side in the other of the opening or the closing direction.

Thus, neither DE '912 nor DE '997, nor the combination thereof, teaches or suggests each and every recitation of Applicants' claim 1. Accordingly, Applicants respectfully submit that the rejection of dependent claim 11 under 35 U.S.C. § 103(a) as unpatentable over DE '912, either alone or in view of DE '997, is improper for at least this reason, and should be withdrawn.

Having traversed each and every claim rejection, Applicants respectfully request that the rejections of claims 1-12 be withdrawn, and claims 1-12 be passed to issue.

Applicants respectfully submit that nothing in the current Amendment constitutes new matter. New claim 13 is supported by at least the original claim 2. New claim 14 is supported by at least paragraph [0029] of the Specification.

Regarding the Examiner's inquiry as to the existence of a European Search Report (ESR) corresponding to the current application, Applicants confirm that such a report has been published by the EPO as Publication No. EP 1 440 726 A3.


As noted above, the current Office Action was not properly made Final. Thus, Applicants submit that they are entitled to submit an Information Disclosure Statement at this time, together with the fee provided for under 37 C.F.R. § 1.17(p). Accordingly, a copy of the ESR and an Information Disclosure

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Statement (IDS) including the cited references is submitted herewith, along with the requisite fee. Applicants respectfully request that consideration of the references cited therein be made of record in the current application.

Other than the fee submitted in connection with the submission of an IDS, Applicants believe no additional fees are due in connection with this Response. If any additional fees are deemed necessary, authorization is hereby granted to charge any such fees to Deposit Account No. 13-0235.

Respectfully submitted,

By 
Marina F. Cunningham
Registration No. 38,419
Attorney for the Applicants

McCORMICK, PAULDING & HUBER LLP
CityPlace II, 185 Asylum Street
Hartford, CT 06103-3402
(860) 549-5290